Ground Based Radar

Networking, Schedule and Risk Evaluation Final Report

Attachment A

Evaluation of the Simplified What-If Model

Technical Report 3415-001-011

DISTRIBUTION STATEMENT A

Approved for public release; Distribution Unlimited

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Submitted to:

U.S. Army Space and Strategic Defense Command

P.O. Box 1500

Attn.: SFAE-MD-THA-PR

Huntsville, Alabama 35807-3801

Hilton Systems, Incorporated

4040 S. Memorial Parkway, Suite G, Huntsville, Alabama 35802

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OFFICE OF THE UNDER SECRETARY OF DEFENSE (ACQUISITION & TECHNOLOGY) DEFENSE TECHNICAL INFORMATION CENTER 8725 JOHN J KINGMAN RD STE 0944 FT BELVOIR VA 22060-6218



IN REPLY REFER TO

DTIC-OMI

SUBJECT: Distribution Statements on Technical Documents

TO:

- Reference: DoD Directive 5230.24, Distribution Statements on Technical Documents,
 Mar 87.
- 2. The Defense Technical Information Center received the enclosed report (referenced below) which is not marked in accordance with the above reference.

GROUND BASED RADAR ATTACHMENT A FINAL REPORT DASG-60-94-C-0015

- 3. We request the appropriate distribution statement be assigned and the report returned to DTIC within 5 working days.
- 4. Approved distribution statements are listed on the reverse of this letter. If you have any questions regarding these statements, call DTIC's Input Support Branch, (703) 767-9092, 9088 or 9086 (DSN use prefix 427).

FOR THE ADMINISTRATOR:

1 Encl

CRYSTAL RILEY Chief, Input Support Branch

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Assessment of Dynamic Analysis (DynAl) Ouick Response Acquisition Risk What If Model

Introduction

The SysTeam, Inc. assessment of the DynAl model is based on the information contained in Technical Report TR-995-01 submitted on 29 September 1995.

Discussion

The quick response acquisition risk what-if model was being developed by Dynamic Analysis in order to assist the Project Office with assessing the various changes to the acquisition strategy, particularly in the funding/budgeting area. The construction of the model was based on relationships between fixed and variable costs, schedule and production quantities. Factors which reflect these varying relationships were also being developed. Although the development for THAAD application is now in the preliminary stages, a similar model was developed by DynAl for the STINGER program. To refine the model for THAAD efforts, several decisions which effect the direction of the development effort would have to be made. These decisions include answering the following question defined by DynAl as areas of concern which must be addressed by the Project Office.

- 1. Is it necessary for the model to match the POEs exactly? What are the boundaries for estimating error?
- 2. Based on the initial review of the POEs and identification of issues in the different phases, what phases of the program are to be included in the model? EMD and Production or Production only?
- 3 At what level of detail does the PO want to see costs?
- 4. What is the primary type of what-if to be performed using the model? Example: quantity changes, Schedule changes or slips, Funding alternatives (cuts/plus ups)
- 5. Based on the what-ifs performed now using the POEs, what are the main cost drivers which are adjusted or varied?
- 6. What are the interrelationships between the hardware item quantities? Example: For every X number of missiles, Y number of support items must be procured.
- 7. What types of inputs does the PO want the user to make? Example: User inputs quantities and model estimates costs. User inputs funding line (costs) and model

determines quantities which can be procured. User inputs schedule slip and model returns new funding profile.

8. What, if any, is the relationship between missile system and radar system funding?

Summary

The output generated by a model of this type would provide an excellent basis of comparison between what-if exercises and integrated risk results. The process of refining budgets over time would also enhance the cost estimating process and , at a higher level, the overall program management.